September 10, 2003

Ms. Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First Street N.E.
Washington, D.C. 20426

Re: Draft Environmental Impact Statement for Hydropower Relicensing of the Housatonic River Hydroelectric Project, FERC Project No. 2597-019 (Falls Village Project) and 2576-022 (Housatonic Project), EPA CRP Number FRC-B05193-CT

Dear Secretary Salas:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), Section 404 of the Clean Water Act, and Section 309 of the Clean Air Act, we have reviewed the Draft Environmental Impact Statement (DEIS) for the proposed Housatonic and Falls Village hydropower relicensing project proposed by Northeast Generation Services Company (NGC) for these facilities in Connecticut.

According to the DEIS, the Housatonic River Hydroelectric Project consists of five separate hydropower developments (Falls Village, Bulls Bridge, Rocky River, Shepaug and Stevenson) on the Housatonic River in Litchfield, New Haven, and Fairfield counties, Connecticut. Its operations affect 76.4 miles of the Housatonic River in Connecticut. The project impoundments represent a conversion of 35 miles of the river from lotic to lentic habitat. The manipulation of streamflow, with respect to timing, duration and frequency, by the project affects 41 miles of the Housatonic riverine habitat in Connecticut.

One of EPA's roles in the relicensing process is to determine whether the proposed operation of the Housatonic River Project, and the conditions for its operation, as set forth in the proposed Federal Energy Regulatory Commission (FERC or the Commission) license and the Connecticut Department of Environmental Protection (CT DEP) Section 401 Water Quality Certification (WQC), are consistent with, and will allow for the attainment of, state water quality standards. In support of that goal EPA New England has provided detailed comments as an intervenor on the project. Specifically, we have commented on the draft and final FERC applications submitted by NGC; draft and final WQCs; and on the Scoping Document (SD1) issued for the current DEIS. Our comments provided targeted recommendations about operational measures and conditions FERC should implement as part of the relicensing process. Our primary concerns about the DEIS analysis and the conclusions it contains are summarized below and detailed in the technical attachment that follows. The DEIS falls short of addressing and acknowledging many of the concerns and issues we raised in our previous comments. We therefore are

concerned about the proposed FERC action and supporting analysis for the following reasons:

- **The staff recommended alternative in the DEIS does not include all of the conditions of the WQC for the Housatonic River Project in the proposed project license.** On August 24, 2000, the CT DEP issued a WQC for the Housatonic River Project pursuant to Section 401(a)(1) of the Clean Water Act (CWA). The CWA authorizes states to certify that an activity requiring a federal license or permit will meet applicable state water quality standards. The conditions contained in the August 2000 WQC were supported by EPA and the Department of Interior Fish and Wildlife Service (DOI) and were not opposed by NGC. As you know, Section 401(d) of the CWA provides that any certification provided under this section shall become a condition on any federal permit or license. The DEIS correctly states that the Section 401 conditions issued by CT DEP for this project must be incorporated as conditions of the FERC license for the project. Despite this requirement, the FERC staff recommendations in the DEIS do not include all of the mandatory conditions in the license. The FEIS should resolve this discrepancy so that the license conditions are fully consistent with the Section 401 conditions.

- **Flow and operational recommendations provided in the DEIS for the Falls Village and Bulls Bridge projects are not protective of aquatic resources and are inconsistent with the CT DEP WQC.** EPA disagrees with the FERC staff interpretation of flow studies associated with these projects. EPA reviewed flow studies accompanying the draft and final applications to determine flows necessary to provide adequate fish and other aquatic life habitat (macro-invertebrates), including flow releases to the bypass reaches. As we stated in our previous comments on the applications and during the WQC process, we believe that the Falls Village and Bulls Bridge projects should be operated as run of river because it would provide the most stable flow regime and relatively high suitability for fisheries habitat and other aquatic communities.

- **EPA's recommended alternative was not considered in the DEIS.** The Commission's Project Scoping Document (SD1), distributed in late 2000, suggested that the EIS should consider the applicant's proposed action; alternatives to the proposed action; and the no action alternative. Specifically, EPA's scoping comments requested that the Commission evaluate the applicant's proposal as modified by the CT DEP WQC as the proposed action. The DEIS does not do this, nor is such an alternative included as an alternative to the proposed action. Rather, the DEIS explores the no action, the applicant's proposed action and a proposed action with modifications suggested by FERC staff and "Conservation Intervenors." The lack of consideration of the applicant's proposal as modified by the mandatory conditions in the WQC as a reasonable alternative leaves the analysis incomplete. EPA believes that the information necessary to describe the impacts of such an alternative is contained in the record.

For the reasons discussed above and in the technical attachment, EPA has rated this DEIS "Environmental Concerns; Insufficient Information" in accordance with EPA's national rating system, a description of which is attached. We request that the concerns identified in these comments be addressed and resolved in the FEIS. If you have any questions about our letter please feel free to contact either Ralph Abele of EPA's Office of Ecosystem Protection at (617) 918-1629 or Timothy Timmermann of EPA's Office of Environmental Review at (617) 918-1025.

Sincerely,

Robert W. Varney
Regional Administrator

Attachment

cc. FERC Service list

Technical Attachment

Environmental Effects by Hydroelectric Facility and EPA Recommendations

Falls Village Project

The longest stretch (20 miles) of free-flowing riverine habitat within the project area is downstream of the powerhouse at Falls Village. The DEIS acknowledges that, "based on fisheries habitat suitability, run of river operation (ROR) for the Falls Village Development would provide for the most stable and relatively high suitability for the flow regimes examined."

Bain and Travnichek[1] and others predict that fluctuating streamflows below hydroelectric projects change the densities and species compositions of fish differently in shoreline and midstream habitats and the extent of change depends on the severity of flow regulation and the distance downstream of hydroelectric dams. The final application notes that while existing operational regimes cause habitat fluctuations of a similar or lesser range than natural flow variations, they may occur at a much greater frequency than naturally occur. It acknowledges that peaking operations are most likely to reduce habitat quality at times when sensitive life stages are most abundant -- typically late spring and early summer and states that adoption of a ROR or reduced peaking mode at critical times in the life cycles of resident species could enhance reproductive success. CT DEP found in its analysis of the applicant's data that the reduced occurrence of fluvial specialists (and the presence of habitat generalists) reflects the operational influence of existing facilities on community structure. CT DEP also believes that it is reasonable to conclude that operating schemes have had a negative effect on the freshwater mussel community of the upper Housatonic. EPA requested ROR in its comment letters on the draft and final applications and during the WQC process because it would provide the most stable and relatively high suitability for fisheries habitat and other aquatic communities.

The DEIS points out that larger areas of shoreline habitat would be dewatered, than currently are, if drawdowns were to regularly reach 5 feet. Despite this, FERC staff conclude that peaking, including headpond fluctuations of up to 5 feet daily should be allowed. This recommendation conflicts with the CT DEP WQC conditions which limit drawdowns to times necessary for required maintenance. EPA disagrees with the FERC staff recommendation to continue peaking at Falls Village for nine months between July and March of each year (modified ROR) and urges the Commission to follow the conditions of the WQC for the project which requires, among other things, year round ROR operation.

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[1]Mark B. Bain and Vincent H. Travnichek,1996, Assessing Impacts and Predicting Restoration of Flow Alterations in Rivers Developed for Hydroelectric Power Production, IAHR Symposium on Habitat Hydraulics.

Bulls Bridge

The Bulls Bridge development consists of an impoundment created by two dams and a 1.9 mile bypass/power canal. There is a statutory minimum total flow of 100 cfs, which includes19 cfs from the Tenmile River. Leakage through the Bulls Bridge turbines totals about 50 cfs which when added to the bypass flows provides for a continuous project flow of 150 cfs.

Project flow study data show that increased flows beyond that proposed initially by the applicant will provide more suitable habitat for various species and life stages studied. CT DEP and FWS both recommend 200 cfs to the bypass reach and a ROR operational mode. EPA concurs with these recommendations. The FERC staff recommendation in the DEIS also calls for 200 cfs. However, the staff does not recommend year round ROR in the FEIS. For the reasons cited in our comments on the Falls Village Project above, EPA believes the staff's modified ROR strategy should be abandoned for year-round ROR and included as a license condition as required by the WQC.

Stevenson

Leakage past the generating units and project structures at the Stevenson facility is normally between 100 and 200 cfs, with an average of approximately 130 cfs. The current license requires a minimum flow of 50 cfs. The applicant proposes a bulk release of 6250 cfs every four days, equivalent in volume to a continuous flow release of 280 cfs over a 4 consecutive day period, or the inflow, whichever is less.

The WQC requires an instantaneous minimum flow below the project of 300 cfs and the development of a ramping plan. It also requires development and implementation of a monitoring plan to insure that project releases comply with the water quality standard for dissolved oxygen. The FERC staff recommendation provided in the DEIS for project flow release is 130 cfs. This is inconsistent with the state WQC. The recommendations in the FEIS should be consistent with the state WQC.

Impacts to Littoral Communities at the Shepaug and Stevenson Developments

The WQC for the project requires that a plan be developed to assess the impact on the littoral community from impoundment fluctuations at the Shepaug and Stevenson developments. The WQC also reserves the state's authority to modify project operations as necessary, based on the outcome of these studies, to ensure attainment of state water quality standards. The FERC staff recommendations conflict with the WQC conditions which limit drawdowns to those necessary for annual maintenance, minimization of flooding impacts, those prepared in response to a public safety emergency and those authorized in writing in advance. The staff recommendations also do not include the conditions of the WQC that require corrective actions to mitigate for significant adverse effects associated with normal operations. These and all other WQC conditions should be included as conditions of the license.